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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,783	04/02/2004	Nicolaas Van Der Plas	03910/0201067-US0	9960
7278	7590	11/15/2006	EXAMINER	
DARBY & DARBY P.C.			COOLEY, CHARLES E	
P. O. BOX 5257			ART UNIT	
NEW YORK, NY 10150-5257			PAPER NUMBER	

1723

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/816,783	Applicant(s) VAN DER PLAS, NICOLAAS	
	Examiner Charles E. Cooley	Art Unit 1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner *draftspersons*.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) _____ Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) - <i>2 forms</i> | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20060818</u> | 6) <input type="checkbox"/> Other: _____ |

FINAL OFFICE ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. § 119, which papers have been placed of record in the file.

Information Disclosure Statement

2. Note the attached PTO-1449 form submitted with the Information Disclosure Statement filed 18 AUG 2006.

Drawings

3. The drawings are objected to for the reasons on the attached PTO-948 form.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

Replacement Drawing Sheets

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment. Any replacement drawing sheet must be identified in the top margin as "Replacement Sheet" (37 CFR 1.121(d)) and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin.

Annotated Drawing Sheets

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheets must be clearly labeled as "Annotated Marked-up Drawings" and accompany the replacement sheets.

Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may **NOT** be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

Specification

4. The disclosure is objected to because of the following informalities:
 - a. the specification contains lines with irregular spacing due to printing errors (see page 3, line 3; page 5, line 20; and page 6, lines 16 and 25). This can be corrected by replacing the entire paragraph with a paragraph with proper spacing.

Appropriate correction is required.

5. The abstract is acceptable.
6. The title is acceptable.
7. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 C.F.R. § 1.75(d)(1) and M.P.E.P. § 608.01(I).

Correction of the following is required:

- a. The subject matter of each of new claims 16-19 lacks antecedent basis in the specification but is reasonably shown by the drawing figures.

608.01(o) [R-2] Basis for Claim Terminology in Description

The meaning of every term used in any of the claims should be apparent from the descriptive portion of the specification with clear disclosure as to its import; and in mechanical cases, it should be identified in the descriptive portion of the specification by reference to the drawing, designating the part or parts therein to which the term applies. A term used in the claims may be given a special meaning in the description. No term may be given a meaning repugnant to the usual meaning of the term.

Usually the terminology of the original claims follows the nomenclature of the specification, but sometimes in amending the claims or in adding new claims, new terms are introduced that do not appear in the specification. The use of a confusing variety of terms for the same thing should not be permitted.

New claims and amendments to the claims already in the application should be scrutinized not only for new matter but also for new terminology. While an applicant is not limited to the nomenclature used in the application as filed, he or she should make appropriate amendment of the specification whenever this nomenclature is departed from by amendment of the claims so as to have clear support or antecedent basis in the specification for the new terms appearing in the claims. This is necessary in order to insure certainty in construing the claims in the light of the specification, *Ex parte Kotler*, 1901 C.D. 62, 95 O.G. 2684 (Comm'r Pat. 1901). See 37 CFR 1.75, MPEP § 608.01(i) and § 1302.01. >Note that examiners should ensure that the terms and phrases used in claims presented late in prosecution of the application (including claims amended via an examiner's amendment) find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description, see 37 CFR 1.75(d)(1). If the examiner determines that the claims presented late in prosecution do not comply with 37 CFR 1.75(d)(1), applicant will be required to make appropriate amendment to the description to provide clear support or antecedent basis for the terms appearing in the claims provided no new matter is introduced.<

Claim Rejections - 35 U.S.C. § 112, second paragraph

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 2-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 3, line 3: does "a radially outer boundary: have any relationship to the radially outer boundary of the guide plate recited in claim 15, line 13?

Claim 4, line 2 is worded in an awkward manner - it appears "the" after "plate" should be deleted.

Claim 7, line 2: is " a screw shaft" a shaft of the recited mixing screw?

Claim 10 repeats subject matter found in claim 15 (thus not complying with 37 CFR 1.75).

Claim 11: "the leading take-up edge of said flight of the mixing screw" lacks antecedent basis - note only the guide plate is recited as having such a take-up edge in claim 15.

Claim 12: "the leading take-up edge of the flight of the mixing screw" lacks antecedent basis - note only the guide plate is recited as having such a take-up edge in claim 15.

Claim 13: "the leading take-up edge of the mixing screw" lacks antecedent basis - note only the guide plate is recited as having such a take-up edge in claim 15. Also, it

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appears --flight of the-- should be inserted before "mixing screw" in line 3 (compare with claims 11 and 12).

Claim 15, line 9: "the mixing" lacks antecedent basis - it is not known what is being referred to.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claims 2, 3, 6, 7, 8, 9, 10, 11, 14, 15, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chupka (US 4,725,007) in view of Blakley et al. (US 4,593,861).**

Chupka (US 4,725,007) discloses the recited subject matter substantially as claimed including a device having a chamber 12, 16 having a bottom 14 and a screw (28), (28A), or (28B) in the chamber that is driven about a vertical rotational axis, the screw including at least one generally helical flight (50 or 52), (50A or 52A), or (50B or 52B) including an edge proximate 54, 54A, or 54B; said flight being dimensioned to have its greatest radius from the vertical rotational axis at the leading edge, and decrease upwardly as seen in the Figures; a rotary driven device 34 adjacent said

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chamber bottom 14; said rotary driven device 34 comprising at least two of the recited guide plates (36) or (36B) equally spaced around said vertical rotational axis; each said guide plate including side edges (wherein a selected edge can be construed as leading or trailing as a function of the direction of the rotation of the screw 28), an upwardly facing deposition surface, and a radially outer boundary with a circumferential length and a distance to said rotational axis; wherein the radial distance of the boundary of said deposition surface of each of said guide plates (36) or (36B) to the rotational axis is substantially equal along its circumferential length in the rotating direction, and is greater than the greatest radial distance of the flight to said vertical rotational axis as seen in the Figures; the guide plates (36) or (36B) having flat and downwardly angled surfaces or walls as seen in the Figures; the guide plate 36B having an edge connected to an edge 54B of the flight (proximate 46B in Fig. 5); the screw (28), (28A), or (28B) having the helical flight (50 or 52), (50A or 52A), or (50B or 52B) with windings that narrow from the bottom to the top of the screw.

Chupka (US 4,725,007) does not disclose the discharge opening in a vertically extending wall of the chamber. The patent to **Blakley et al. (US 4,593,861)** discloses an analogous device having a chamber 10, 12 having a bottom 11 and a screw 40 in the chamber that is driven about a vertical rotational axis, the screw including at least one generally helical flight 42; and a discharge opening 13 in a vertically extending portion 12 of the chamber. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have provided the similar chamber of Chupka with a discharge opening in a vertically extending wall of the

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chamber as taught by Blakley et al. for the purpose of enabling rapid dumping of the contents of the chamber via the discharge opening (col. 4, lines 7-11).

Allowable Subject Matter

12. Claims 4, 5, 12, 13, 18, and 19 would be allowable if rewritten to overcome the rejection under 35 U.S.C. § 112 and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

13. Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground of rejection necessitated by amendment.

Conclusion

14. Applicant's amendment necessitated the new ground of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

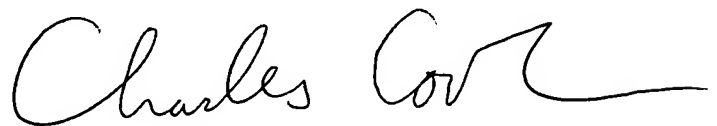
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Cooley whose telephone number is (571) 272-1139. The examiner can normally be reached on Mon-Fri. The examiner's supervisor, Wanda Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read "Charles Cooley", with a long horizontal flourish extending to the right.

Charles E. Cooley
Primary Examiner
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8 November 2006